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BRIEF OPINION

A Brief Opinion on Pulling Down Briefs

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Digital rectal examination (DRE) is stressed in medical training as an integral component of genitourinary evaluation. Criticism regarding this examination is, to most physicians, much ado about nothing. However, DRE is considered by many patients to be a truly invasive test, and therefore its role should be critically evaluated, as with any other medical test and procedure. In this spirit, a deeper evaluation *of* DRE is warranted before a deeper evaluation *with* a DRE.

Until the advent of prostate-specific antigen (PSA) testing in the mid-1980s, DRE was the only available method for the early detection of prostate cancer. However, it is marked with considerable interobserver variability and low positive predictive value, ranging from 6% to 33% in the normal PSA range (1-3). A recent subset analysis of the Prostate, Lung, Colorectal, and Ovarian screening trial found among 5064 men aged $\leq$75 years only 2% with Gleason score $\geq$7 prostate cancer in the setting of a normal PSA level and abnormal results on DRE (4).

We do not argue that DRE should remain in the realm of primary care providers and urologists, who screen and diagnose prostate cancer. Yet even for these physicians, there are practical considerations regarding the tangible nature of this examination. Koulikov et al (5) reported the physical nuances with respect to DRE accuracy. The median anal verge to prostate apex distance in this study was 5 cm (range, 3-7.5 cm), and anal verge to prostate base distance was 10.3 cm (range, 7.3-15.7 cm). The median urologist index finger length was 8.25 cm (range, 7-9 cm), which translated into a 33.7% and 75.8% inability to palpate half and one-fourth of the prostate, respectively. Thus, it is not surprising that detection of prostate cancer was similar to historic rates at 21%.

However, radiation oncologists see patients with biopsy-proven prostate cancer, often with rectal MRI results and images, and often with results of molecular tests. What role does DRE play in the digital era for radiation oncologists? A recent survey of expert genitourinary radiation oncologists revealed that there is still an overwhelming tendency to perform DRE among genitourinary experts, but only 50% of them believe that the findings on DRE would change the course of management (Fig. 1).

One must call into question the significance of DRE findings in the postbiopsy setting because reactive changes, such as edema or bleeding, may lead to a false-positive designation of gross disease. Even in the setting of biochemical recurrence after prostatectomy, when DRE could in theory lead to change in management—such as addition of androgen deprivation therapy and/or escalation of radiation dose to the palpable nodule—the incidence of palpable induration or nodularity on DRE has been reported to be exceedingly low at 0.8% (6). A more contemporary analysis of the role of endorectal coil multiparametric MRI in men with biochemical recurrence after radical prostatectomy revealed the rate of MRI-detected prostate bed lesions to be 40% in men with PSA $>$0.3 ng/mL, compared with 13% in men with PSA $\leq$0.3 ng/mL (7). It seems that MRI is a more sensitive tool than DRE and should be obtained to guide treatment decision in this clinical scenario. However, DRE could certainly precede

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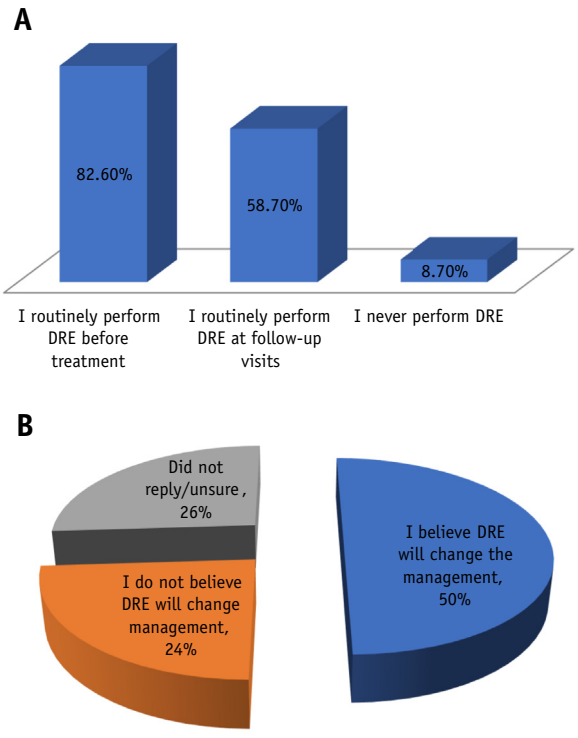

Fig. 1. Survey of expert genitourinary radiation oncologists regarding their (A) digital rectal examination (DRE) utilization, and (B) perception of digital rectal examination impact on clinical management.

and/or replace diagnostic MRI, especially when imaging cost may be prohibitive for an individual patient or for the health care system.

The basic principle in medicine is to order a test (especially if one is expensive) only if it may reveal information that would lead to change in management. Digital rectal examination is cheap, financially, but it certainly has a high price for the patient—both emotional and physical. It is not uncommon to hear a patient ask "Doc, do I *really* need to have this exam done, what will you find on the exam that you didn't see on my prostate MRI images?"

Really, do we need DRE? Routinely? Or should we put the routine use of DRE where it belongs—behind us?

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